

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

10-3-03
10**POWER OF ATTORNEY
and
CORRESPONDENCE ADDRESS
INDICATION FORM**

Application Number	10/048,129
Filing Date	04/05/2002
First Named Inventor	Larsen, Thomas A.
Title	Enhanced Crossflow Heat...
Art Unit	3743
Examiner Name	
Attorney Docket Number	696-264 PCT-US (BGR-017)

I hereby appoint:

☐ Practitioners at Customer Number:

OR

☒ Practitioner(s) named below:

Name	Registration Number
Alan B. Clement, Esq.	34,563

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please recognize or change the correspondence address for the above-identified application to:

☐ The above-mentioned Customer Number:

OR

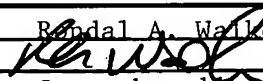
☐ The address associated with Customer Number:

OR

<input checked="" type="checkbox"/> Firm or Individual Name	Alan B. Clement, Esq.		
Address	HEDMAN & COSTIGAN, P.C.		
Address	1185 Avenue of the Americas		
City	New York	State	NY
		Zip	10036
Country	US		
Telephone	212-302-8989	Fax	212-302-8998

I am the:

☐ Applicant/Inventor.☒ Assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)**SIGNATURE of Applicant or Assignee of Record**

Name	Randal A. Walker, Assistant Secretary		
Signature			
Date	September 11, 2003	Telephone	281-368-4201

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☒ *Total of _____ forms are submitted.

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Thomas L. Larsen et al.

Application No./Patent No.: 10/048,129 Filed/Issue Date: April 5, 2002

Entitled: Enhanced Crossflow Heat Transfer

Stone & Webster, Inc., a corporation
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.
The extent (by percentage) of its ownership interest is _____ %
in the patent application/patent identified above by virtue of either:

A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

OR

B. ☒ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: Larsen et al. To: Washington Group International, Inc.
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.
Washington Group
2. From: International, Inc. To: Stone & Webster, Inc.
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.
3. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

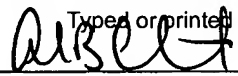
☐ Additional documents in the chain of title are listed on a supplemental sheet.

☒ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

September 26, 2003
Date
212-302-8989
Telephone number

Alan B. Clement, Reg. No. 34,563
Typed or printed name

Signature
Attorney of Record
Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ASSIGNMENT OF PATENT RIGHTS

We, **Thomas L. Larsen of 7 Lansbury Lane, Andover, Massachusetts 01810 and Umesh K. Jayaswal of 1 Stearns Road, Lexington, Massachusetts 02421**, having invented improvements in **Enhanced Crossflow Heat Transfer**, and having filed an application for United States patent describing the same and based thereon, as Serial No. **10/048,129** Filed January 14, 2002, for good and valuable consideration, receipt of which is hereby acknowledged from **Washington Group International, Inc.**, an Ohio Corporation having a principal place of business in **Boise, Idaho USA** and hereinafter called the Assignee (which term shall include the successors and assigns), do hereby sell, assign and transfer unto the Assignee, our entire right, title, and interest, in and throughout the United States of America (including its territories and dependencies) and all countries foreign thereto, in and to and under said application (which term shall include hereinafter where the context so admits all divisional, continuing, reissue and other patent applications based thereon) and all inventions (which term shall include each and every such invention, or any part thereof) therein described, and any and all patents and like rights of exclusion (including extensions thereof) of any country which may be granted on or for said inventions or on said application;


And for the same consideration We do also hereby sell, assign, and transfer unto the Assignee, all our rights under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, and all other treaties of like purpose in respect of said inventions and said application, and We do hereby authorize the Assignee to apply in our name or their own name (in a manner to be agreed upon by the Assignee) or their designee for patents and like rights of exclusion on or for said inventions in all countries, claiming (if the Assignee so desires) the priority of the filing date of said application under the provisions of said Convention, Treaty or any such other Convention or Treaty;

And for the same consideration, We do hereby agree for ourselves and for our respective heirs, executors, and administrators, promptly upon request of the Assignee to execute and deliver without further compensation any power of attorney, assignment, original, divisional, continuing, reissue or other application or applications for patent or patents or like rights of exclusion of any country, or other lawful documents and any further assurances that may be deemed necessary or desirable by the Assignee, fully to secure to it said right, title, and interest as aforesaid in and to said inventions, applications, and said several patents and like rights of exclusion (including extensions thereof) or any of them, all, however, at the expense of the Assignee, its successors, or assigns;

And We do hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America and the corresponding Official of each country foreign thereto to issue to the Assignee, any and all patents and like rights of exclusion which may be granted in any country upon said application on or for said inventions;

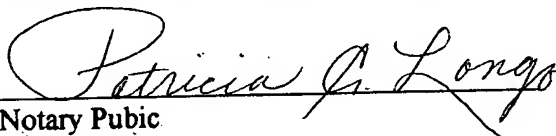
And We do hereby covenant for ourselves and our respective legal representatives and agree with the Assignee, that We have granted no right or license to make, use, or sell said inventions to anyone except the Assignee, that prior to the execution of this deed our right, title, and interest in and to said inventions has not been otherwise encumbered by us, and that We have not executed and will not execute any instruments in conflict herewith.

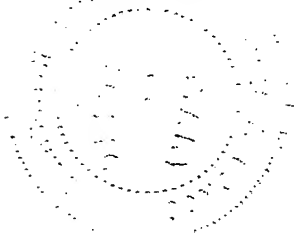
IN WITNESS WHEREOF, I hereunto set my hand and seal this 27th day
of February, 2002.


Thomas L. Larsen

State of New Hampshire
~~Commonwealth of Massachusetts~~)
County of Rochingham) ss.

Before me this 27th day of February 2002, personally appeared
Thomas L. Larsen, who is to me personally known, and acknowledged the foregoing
instrument to be his free act and deed.

 (Seal)
Notary Public



IN WITNESS WHEREOF, I hereunto set my hand and seal this 9th day
of May, 2002.

Umeyasul
Umesh K. Jayaswal

Commonwealth of Massachusetts)
County of Middlesex) ss.

Before me this 9th day of May, 2002, personally appeared
Umesh K. Jayaswal, who is to me personally known, and acknowledged the foregoing
instrument to be his free act and deed.

Catherine A. McCafferty (Seal)
Notary Public
My Commission Expires: Sept. 16, 2005

ASSIGNMENT

WHEREAS, Washington Group International, Inc., a corporation organized under the laws of the State of Ohio, is the owner of the entire right, title and interest in and to the United States patents and patent applications listed on the attached Schedule A; and

WHEREAS, Washington Group International, Inc. may also own certain rights and interests in and to the PCT patent applications listed on the attached Schedule B; and

WHEREAS, Stone & Webster, Inc., a corporation organized under the State of Louisiana, is desirous of acquiring all of Washington Group International, Inc.'s interest in and to the patents and patent applications listed on Schedules A and B;;

NOW, THEREFORE, in consideration of and in exchange for the sum or one dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, Washington Group International, Inc. hereby does sell, assign and transfer unto Stone & Webster, Inc. (i) the entire right, title and interest in and to each of the patents and patent applications listed on Schedule A, and (ii) all right, title and interest (if any) of Washington Group International, Inc. in and to the patent applications listed on Schedule B, and all rights and interests of Washington Group International, Inc. in and to all corresponding applications for patent and patents therefore, in any and all countries, including all divisions, reissues, reexaminations, continuations and extensions thereof.

AND, Washington Group International, Inc. further authorizes and requests any official whose duty it is to issue patents, to issue all patents on said improvements, or patents resulting therefrom, to said Stone & Webster, Inc., as assignee of the entire interest,

AND, Washington Group International, Inc. further agrees that on request and without further consideration, but at the expense of Stone & Webster, Inc., Washington Group International, Inc. will communicate to Stone & Webster, Inc., or its representative, any facts known to it respecting said inventions, will sign all lawful papers, and execute and deliver all divisional, continuing, reissue and/or reexamination applications that may be necessary or desirable to aid Stone & Webster, Inc., or its

successors, to obtain and enforce proper protection for said inventions in the United States of America and its territorial possessions.

WASHINGTON GROUP INTERNATIONAL, INC.

Date: April 17, 2003

BY: [Signature]

Name: MELINA DATSOPOULOS

Title: ASST SECRETARY

State of Massachusetts

County of Middlesex

SS.:

This 17th day of April, 2003, before me personally came the above-named Melina Datsopoulos, to me personally known as the individual who executed the foregoing assignment, who stated that he is the Asst. Secretary of Washington Group International, Inc., the corporation described in the foregoing assignment, and acknowledged to me that he executed the same of his own free will for the purposes therein set forth.

Catherine A. McCafferty
Notary Public



[Signature]
STONE & WEBSTER, INC.

Date: 17 April 2003 BY: [Signature]

Name: N.C. GALLINARO

Title: PRES. PROCESS OF ECM DIV.

State of Massachusetts

County of Middlesex

SS.:

This 17th day of April, 2003, before me personally came the above-named N.C. Gallinaro, to me personally known as the individual who executed the foregoing assignment, who stated that he is the President Process of Stone & Webster, Inc., the corporation described in the foregoing assignment, and acknowledged to me that he executed the same of his own free will for the purposes therein set forth.

Catherine A. McCafferty
Notary Public



SCHEDULE A
ISSUED UNITED STATES PATENTS

<u>PATENT NO.</u>	<u>INVENTOR</u>	<u>DATE ISSUED</u>
4,485,077	Martinez	11/27/84
4,695,664	Whittle	09/22/87
5,141,049	Larson et al.	08/25/92
5,196,632	Larson et al.	03/23/93
5,461,179	Chen et al.	10/24/95
5,686,369	Chen et al.	11/11/97
5,695,724	Chen et al.	12/09/97
5,739,071	Chen et al.	04/14/98
5,602,290	Fallon	02/11/97
5,811,629	Hubbell	09/22/98
6,171,449	Welch	01/09/01
6,376,736	Rutten et al.	04/23/02

PENDING UNITED STATES PATENT APPLICATIONS

<u>SERIAL NO.</u>	<u>INVENTOR</u>	<u>DATE FILED</u>
09/486,667	Welch	06/02/00
10/048,129	Larsen et al.	01/14/02
60/360,355	Hwang et al.	02/28/02
60/388,091	Oleksy et al.	06/12/02
60,394,177	Pizzelli et al.	07/03/02

SCHEDULE B



3. PENDING PCT PATENT APPLICATIONS - WGI / PC GROUP AND OTHERS

REFERENCE NUMBER	SERIAL NUMBER	TITLE	INVENTOR(S)	FILING DATE	OWNERSHIP NOTES	MAINTENANCE DATE
BGR-004PC	PCT/US01/29956 60/235176	Maximizing Meta-Isomers in the Production of Dialkylbenzene Compounds	S. S. Chen C. M. Chi	9/23/2001	Note: Application filed by ExxonMobil	Jointly filed in names of ExxonMobil & WGI
BGR-024PC	PCT/US02/0380160/26 7035	Production of Alkyl aromatic Aromatic Compounds	S. S. Chen S. Hwang	2/6/2002	Note: Application filed by ExxonMobil	Jointly filed in names of WGI & EM
BGR-026FC	60/235127PCT/US01/2 9938	Hydrogenation of Cleavage Effluents in Phenol Production	K. Fallon C. M. Chi F. A. Demers S. Hwang	9/23/2001	Note: Application filed by ExxonMobil	Filed in name of ExxonMobil alone
BGR-032PC	60/249306PCT/US01/4 4249	Economical Purification of Bisphenol A	S. Eviit D. Palmer	11/14/2001	Note: Application filed by Silvertstein	Jointly filed in the names of WGI and RPP